# Alcohol Use

# **DRANK IN PAST 30 DAYS**

Definition: Respondents who report drinking alcohol in the past 30 days.

# Prevalence of Drank in Past 30 Days

- South Dakota 58.6%
- o Nationwide median 56.2%

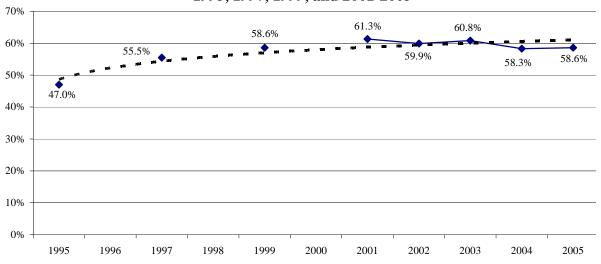
# **Healthy People 2010 Objective**

There was no stated Healthy People 2010 Objective for drinking in the past 30 days.

# **Trend Analysis**

Overall, since this question was first asked in 1995 the percent of respondents who drank in the past 30 days has been increasing.

Figure 28
Percent of Respondents Who Drank in Past 30 Days, 1995, 1997, 1999, and 2001-2005



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1995, 1997, 1999, and 2001-2005

# **Demographics**

**Gender** Males exhibit a significantly higher prevalence of drinkers than females. This difference is demonstrated throughout almost every demographic category.

Age The prevalence of drinking alcohol generally decreases as age increases. This decline is only after a sharp increase occurs when the 25-34 age group is reached.

**Race** Whites exhibit a significantly higher prevalence of drinkers than American Indians.

# **Region** The American Indian counties region exhibits a significantly lower prevalence of

drinking than the other four regions.

# Household Income

The prevalence of drinking increases as household income increases. This includes significant increases when the \$20,000-\$24,999 and \$50,000-\$74,999 income groups are reached.

#### **Education**

Drinking alcohol increases as education increases. This includes significant increases as the some post-high school and college graduate education levels are reached. Females also show a significant increase when a high school education is attained.

# **Employment Status**

Those who are unable to work demonstrate a very low prevalence of drinking, while those who are employed for wages, self-employed, unemployed, or a student show a very high prevalence.

# Marital Status

Those who are widowed exhibit a significantly lower prevalence of drinking than the other three marital status groups. However, males who have never been married demonstrate a very low prevalence of drinking.

	Table 35 Respondents Who Drank in Past 30 Days, 2005									
	Kespo		wno Dra	nk in Pa		· /	ı	-		
	# Resp.	Total %	95% CI	# Resp.	Male %	95% CI	Female # Resp. % 95% CI			
Total	6,903	58.6	(57.0-60.1)	2.838	66.7	(64.3-69.0)	4.065	50.7	(48.7-52.7)	
Age	0,203	20.0	(37.0-00.1)	2,000	00.7	(04.5-07.0)	4,005	50.7	(40.7-32.7)	
18-24	318	58.2	(51.5-64.6)	124	61.7	(51.1-71.2)	194	54.5	(46.2-62.6)	
25-34	869	70.6	(67.0-74.1)	366	79.1	(73.7-83.6)	503	61.7	(56.8-66.4)	
35-44	1,136	67.2	(63.9-70.3)	498	74.0	(69.3-78.1)	638	60.3	(55.8-64.6)	
45-54	1,356	62.8	(59.8-65.7)	622	67.4	(63.0-71.5)	734	58.2	(54.1-62.3)	
55-64	1,165	55.2	(51.9-58.5)	512	62.7	(57.8-67.3)	653	47.5	(43.1-52.0)	
65-74	999	44.7	(41.1-48.3)	405	57.4	(51.8-62.9)	594	33.6	(29.3-38.1)	
75+	1,021	33.3	(29.9-36.9)	302	48.0	(41.6-54.4)	719	24.1	(20.6-27.9)	
Race	ĺ		,			,			,	
White	6,189	60.1	(58.5-61.7)	2,548	68.5	(66.0-70.9)	3,641	52.0	(49.9-54.1)	
American Indian	490	35.5	(29.6-41.9)	196	40.3	(30.7-50.7)	294	31.0	(24.4-38.4)	
Region			,			,			,	
Southeast	1,580	62.2	(59.2-65.1)	657	70.8	(66.2-74.9)	923	53.2	(49.4-57.0)	
Northeast	1,534	57.0	(54.0-60.0)	596	64.3	(59.6-68.8)	938	50.8	(46.9-54.7)	
Central	1,417	59.8	(56.8-62.7)	619	70.2	(66.0-74.1)	798	49.2	(45.2-53.2)	
West	1,669	56.7	(53.8-59.6)	667	63.4	(58.8-67.8)	1,002	50.6	(47.0-54.2)	
American Indian Counties	703	41.0	(35.8-46.5)	299	49.6	(41.1-58.1)	404	31.9	(26.2-38.3)	
Household Income						,				
Less than \$10,000	361	35.7	(29.1-43.0)	101	44.4	(31.5-58.2)	260	31.7	(24.2-40.3)	
\$10,000-\$14,999	468	37.2	(29.8-45.3)	133	49.8	(35.2-64.4)	335	28.4	(22.5-35.2)	
\$15,000-\$19,999	477	41.0	(35.5-46.8)	178	44.9	(36.0-54.0)	299	38.2	(31.5-45.5)	
\$20,000-\$24,999	640	52.8	(47.8-57.8)	248	60.5	(52.5-67.9)	392	46.7	(40.5-52.9)	
\$25,000-\$34,999	953	56.0	(51.8-60.1)	415	64.6	(58.4-70.4)	538	46.9	(41.4-52.5)	
\$35,000-\$49,999	1,227	62.7	(59.2-66.0)	563	69.5	(64.4-74.1)	664	55.4	(50.7-60.0)	
\$50,000-\$74,999	1,033	70.0	(66.4-73.3)	497	75.5	(70.3-80.0)	536	63.5	(58.5-68.2)	
\$75,000+	873	74.4	(70.5-77.9)	467	77.3	(72.0-81.9)	406	69.9	(64.3-75.0)	
Education										
8th Grade or Less	325	29.6	(23.9-36.0)	153	39.8	(31.1-49.1)	172	17.4	(10.8-26.7)	
Some High School	402	43.5	(35.7-51.6)	175	54.0	(42.3-65.2)	227	30.2	(22.2-39.7)	
High School or G.E.D.	2,198	53.8	(51.0-56.6)	961	62.2	(57.8-66.4)	1,237	44.7	(41.2-48.2)	
Some Post-High School	1,984	60.9	(58.0-63.8)	717	69.4	(64.7-73.8)	1,267	54.1	(50.5-57.7)	
College Graduate	1,985	67.4	(64.8-69.8)	828	75.2	(71.6-78.6)	1,157	59.8	(56.3-63.1)	

Table 35 (continued) Respondents Who Drank in Past 30 Days, 2005											
		Total			Male			Fema	ıle		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI		
Employment Status											
Employed for Wages	3,358	65.7	(63.6-67.8)	1,385	70.3	(67.0-73.4)	1,973	61.1	(58.3-63.7)		
Self-employed	903	67.1	(63.1-70.9)	600	72.1	(67.4-76.4)	303	56.1	(49.0-62.9)		
Unemployed	169	56.9	(45.1-68.0)	*	*	*	*	*	*		
Homemaker	411	38.1	(32.7-43.9)	*	*	*	*	*	*		
Student	126	59.8	(47.7-70.8)	*	*	*	*	*	*		
Retired	1,648	40.8	(38.0-43.6)	606	53.8	(49.2-58.3)	1,042	30.1	(26.9-33.5)		
Unable to Work	285	26.0	(20.5-32.4)	120	33.5	(24.4-44.0)	165	19.7	(13.6-27.7)		
Marital Status											
Married/Unmarried Couple	4,142	61.9	(60.2-63.6)	1,854	69.9	(67.5-72.2)	2,288	54.0	(51.6-56.4)		
Divorced/Separated	959	57.1	(53.3-60.8)	399	66.7	(61.0-72.0)	560	49.2	(44.1-54.2)		
Widowed	974	30.7	(27.5-34.1)	162	48.5	(39.2-57.9)	812	26.4	(23.1-29.9)		
Never Married	817	57.4	(51.8-62.8)	419	58.9	(50.9-66.5)	398	55.2	(48.0-62.2)		

\*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **National Statistics**

The national median for respondents who drank in the past 30 days was 56.2 percent. South Dakota had 58.6 percent of respondents who drank in the past 30 days. Utah had the lowest percent of respondents who drank in the past 30 days with 27.3 percent, while Wisconsin had the highest percent of respondents who drank in the past 30 days with 67.9 percent.

Nationally, Respondents Who Drank in Past 30 Days, 2005 58.6 59.6 58.6 549 62.2 51.5-58.0

Figure 29

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **Further Analysis**

Following are data illustrating the percent of those who drank in the past 30 days for various health behaviors and conditions. For example, 61.1 percent of respondents who stated they had less than five servings of fruits and vegetables drank in the past 30 days, while 48.1 percent of respondents who had at least five servings of fruits and vegetables drank in the past 30 days.

Table 3 Drank in Past 30 Days for Selected Healt		nd Conditions, 200	)5
Health Behavior or Condition	# Respondents	% Drank in Past 30 Days	95% CI
Fair or Poor Health Status	1,130	41.4	37.5-45.3
Excellent, Very Good, or Good Health Status	5,766	61.1	59.4-62.8
Physical Health Not Good for 30 Days of the Past 30	519	31.7	26.8-37.0
Physical Health Not Good for 0-29 Days of the Past 30	6,317	60.3	58.7-61.9
Mental Health Not Good for 20-30 Days of the Past 30	359	46.6	39.9-53.4
Mental Health Not Good for 0-19 Days of the Past 30	6,499	59.3	57.7-60.9
Usual Activities Unattainable for 10-30 Days of the Past 30	465	35.6	30.6-40.9
Usual Activities Unattainable for 0-9 Days of the Past 30	6,400	60.0	58.4-61.6
Dissatisfied / Very Dissatisfied with Life	270	43.3	35.2-51.7
Satisfied / Very Satisfied with Life	6,427	58.9	57.3-60.5
Obese (BMI = 30.0+)	1,772	55.0	51.9-58.1
Overweight (BMI = 25.0-29.9)	2,548	62.0	59.5-64.3
Recommended Weight (BMI = 18.5-24.9)	2,211	59.7	56.9-62.5
Underweight (BMI < 18.5)	103	46.2	32.1-60.9
No Leisure Time Physical Activity	1,777	49.4	46.3-52.4
Leisure Time Physical Activity	5,125	61.2	59.4-63.0
No Moderate Physical Activity	3,602	56.1	53.9-58.2
Moderate Physical Activity	2,948	61.3	58.9-63.7
No Vigorous Physical Activity	5,399	56.6	54.8-58.3
Vigorous Physical Activity	1,281	64.3	60.5-67.9
Less Than Five Servings of Fruits and Vegetables	5,230	61.1	59.3-62.8
At Least Five Servings of Fruits and Vegetables	1,589	48.1	44.9-51.4
Not Heard of "Healthy South Dakota" Program	4,472	58.0	56.0-59.9
Heard of "Healthy South Dakota" Program	2,133	59.0	56.2-61.7
Current Smoker	1,316	64.5	61.0-67.8
Former Smoker	1,929	58.3	55.5-61.0
Never Smoked	3,640	56.5	54.3-58.7
Smokeless Tobacco Use	362	75.6	68.5-81.6
No Smokeless Tobacco Use	6,331	56.9	55.3-58.5
Hypertension	2,224	50.6	48.1-53.2
No Hypertension	4,671	61.3	59.4-63.1
High Blood Cholesterol	2,090	53.4	50.9-56.0
No High Blood Cholesterol	3,430	59.9	57.8-61.9
Not Taking any Precautions Against West Nile Virus	2,103	56.1	53.1-59.1
Taking Precautions Against West Nile Virus	4,561	58.9	57.0-60.7
No Health Insurance (18-64)	416	55.2	48.3-61.9
Health Insurance (18-64)	4,232	63.8	61.9-65.7
Employer Based Health Insurance Coverage (18-64)	2,774	68.3	66.1-70.4
Private Health Insurance Plan (18-64)	639	65.9	60.6-70.8
Medicare (18-64)	146	39.4	30.3-49.3
Medicaid or Medical Assistance (18-64)	182	34.4	25.0-45.2
The Military, CHAMPUS, TriCare, or the VA (18-64)	212	55.7	46.7-64.3
The Indian Health Service (18-64)	228	39.6	30.7-49.4

	(continued)		
Drank in Past 30 Days for Selected 1		% Drank in Past	
Health Behavior or Condition	# Respondents	30 Days	95% CI
No Flu Shot (65+)	500	38.4	33.6-43.5
Flu Shot (65+)	1,514	38.9	36.0-41.8
No Pneumonia Shot (65+)	654	40.8	36.5-45.3
Pneumonia Shot (65+)	1,301	37.6	34.5-40.8
Diabetes	607	39.9	35.2-44.8
No Diabetes	6,295	59.8	58.2-61.4
Current Asthma	515	50.2	44.2-56.2
Former Asthma	176	44.8	35.0-54.9
Never Had Asthma	6,181	59.7	58.1-61.4
Previously Had a Heart Attack	436	36.8	31.5-42.5
Never Had a Heart Attack	6,425	59.7	58.1-61.3
Have Angina or Coronary Heart Disease	444	37.2	32.1-42.6
Do Not Have Angina or Coronary Heart Disease	6,401	59.8	58.1-61.4
Previously Had a Stroke	256	31.7	23.8-40.7
Never Had a Stroke	6,631	59.4	57.8-60.9
Arthritis	2,421	48.4	46.0-50.9
No Arthritis	4,409	62.4	60.5-64.3
Arthritis - Activities Limited	1,164	42.0	38.4-45.7
No Arthritis - Activities Limited	5,661	61.1	59.4-62.8
Physical, Mental, or Emotional Disability	1,583	42.5	39.2-45.8
No Physical, Mental, or Emotional Disability	5,282	62.3	60.6-64.0
Disability with Special Equipment Needed	604	29.5	25.0-34.4
No Disability with Special Equipment Needed	6,267	60.4	58.8-62.0
Two or More Hours of TV Watched per Day	4,860	57.6	55.7-59.5
Less Than Two Hours of TV Watched per Day	1,773	59.2	56.2-62.2
Never Been Tested for HIV (18-64)	3,488	63.2	60.9-65.3
Been Tested for HIV (18-64)	1,155	62.1	58.6-65.5
Military Veteran	1,125	62.4	58.9-65.8
Not a Military Veteran	5,759	57.8	56.1-59.5

Not a Military Veteran 5,759
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

#### **BINGE DRINKING**

Definition: Respondents who report having five or more alcoholic drinks on one occasion, one or more times in the past month.

# **Prevalence of Binge Drinking**

- South Dakota 18.0%
- o Nationwide median 14.4%

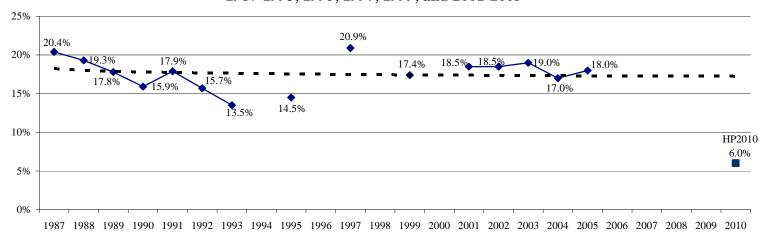
# **Healthy People 2010 Objective**

Reduce the proportion of adults engaging in binge drinking to 6 percent.

#### **Trend Analysis**

From 1987 to 1993, the percent of respondents who engaged in binge drinking was on a decline. In the recent years, the percent of respondents who engage in binge drinking has been increasing. South Dakota has yet to meet the *Healthy People 2010 Objective* of 6 percent.

Figure 30 Percent of Respondents Who Engage in Binge Drinking, 1987-1993, 1995, 1997, 1999, and 2001-2005



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-1993, 1995, 1997, 1999, and 2001-2005

#### **Demographics**

Males demonstrate a significantly higher prevalence of binge drinkers than females. This difference is demonstrated throughout almost every demographic category between the two.
 Age The prevalence of binge drinking decreases as age increases with the first significant decrease occurring with the 35-44 age group.
 Race Overall, there was no significant racial difference observed from the available

Overall, there was no significant racial difference observed from the available data, but American Indian females did demonstrate a significantly higher prevalence of binge drinking than white females.

**Region** There were no significant regional differences observed from the available data.

# Household Income

The prevalence of binge drinking does not seem to follow a pattern as household income increases.

# **Education**

Males with higher education levels exhibit a higher prevalence of binge drinking than those with lower education levels, but females do not seem to exhibit any sort of a pattern with binge drinking as their education levels change.

# **Employment Status**

Those who are homemakers, retired, or unable to work demonstrate a significantly lower prevalence of binge drinking than those who are employed for wages, self-employed, unemployed, or a student.

# Marital Status

Those who have never been married exhibit a very high prevalence of binge drinking, while those who are widowed show a very low prevalence. Males who are divorced show a very high prevalence of binge drinking.

Respond	14- 11		Table 37										
Respondents Who Engage in Binge Drinking, 2005													
	Total Male			Female									
# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI					
6,845	18.0	(16.5-19.5)	2,802	26.6	(24.2-29.2)	4,043	9.7	(8.4-11.1)					
310	31.8	(25.4-38.8)	119	44.4	(34.0-55.4)	191	18.4	(12.9-25.7)					
855	30.2	(26.3-34.4)	356	43.0	(36.6-49.6)	499	16.7	(13.3-20.7)					
1,125	21.6	(19.0-24.6)	493	30.0	(25.6-34.8)	632	13.1	(10.3-16.5)					
1,348	15.1	(13.0-17.4)	615	21.6	(18.1-25.6)	733	8.6	(6.5-11.2)					
1,158	9.8	(7.9-12.1)	507	15.1	(11.8-19.2)	651	4.3	(2.8-6.5)					
991	4.7	(3.3-6.6)	402	8.9	(6.2-12.6)	589	1.0	(0.4-2.9)					
1,021	0.7	(0.3-1.6)	302	1.4	(0.5-3.8)	719	0.3	(0.1-0.8)					
6,139	18.0	(16.5-19.6)	2,516	27.3	(24.7-30.1)	3,623	9.2	(7.9-10.6)					
484	21.0	(16.2-26.7)	194	26.4	(18.4-36.3)	290	15.7	(10.9-22.1)					
1,569	20.1	(17.3-23.3)	652	29.4	(24.6-34.6)	917	10.6	(8.3-13.4)					
	17.2		590	26.5		931	9.2	(7.0-11.9)					
	15.2		606	21.1		794	9.4	(6.9-12.6)					
						1.000	8.3	(6.2-10.9)					
697	22.6		296			401		(8.9-18.9)					
		,			,			,					
354	18.2	(12.5-25.7)	*	*	*	*	*	*					
			129	24.4	(10.8-46.3)	335	5.4	(3.1-9.4)					
473	10.8		176	14.9		297	7.9	(4.8-12.8)					
633	18.6		242	26.6		391	12.3	(8.5-17.6)					
948	18.6		411	28.2		537		(5.8-12.8)					
1217	16.3	`	558					(6.7-11.8)					
								(9.2-16.9)					
869	22.2		464	29.2		405	11.8	(8.6-16.1)					
		,			(			(212 21)					
322	4.9	(2.3-10.1)	150	5.2	(2.3-11.3)	172	4.5	(1.1-16.9)					
_								(6.5-19.9)					
								(7.7-12.1)					
		` /				,		(8.1-13.3)					
		` /				,		(7.1-11.3)					
1,575	17.2	(11.5 15.0)	023	23.7	(21.7 30.2)	1,130	7.0	(7.1 11.3)					
3 326	21.8	(10.8-23.0)	1 365	30.6	(27.2-34.1)	1 061	12.8	(11.0-14.9)					
		` /						(4.8-12.1)					
			334	30.1	(23.3-33.1)	301	*	(4.6-12.1)					
			*	*	*	*	*	*					
					*		*	*					
								(0.6-2.2)					
		/						(1.9-10.7)					
	6,845  310 855 1,125 1,348 1,158 991 1,021  6,139 484  1,569 1,521 1,400 1,658 697  354 464 473 633 948 1217 1,026	6,845         18.0           310         31.8           855         30.2           1,125         21.6           1,348         15.1           1,158         9.8           991         4.7           1,021         0.7           6,139         18.0           484         21.0           1,569         20.1           1,521         17.2           1,400         15.2           1,658         15.4           697         22.6           354         18.2           464         13.1           473         10.8           633         18.6           948         18.6           1217         16.3           1,026         22.7           869         22.2           322         4.9           399         19.7           2,170         16.9           1,966         20.7           1,979         17.2           3,326         21.8           895         23.1           409         4.5           123         26.7           1,643	6,845         18.0         (16.5-19.5)           310         31.8         (25.4-38.8)           855         30.2         (26.3-34.4)           1,125         21.6         (19.0-24.6)           1,348         15.1         (13.0-17.4)           1,158         9.8         (7.9-12.1)           991         4.7         (3.3-6.6)           1,021         0.7         (0.3-1.6)           6,139         18.0         (16.5-19.6)           484         21.0         (16.2-26.7)           1,569         20.1         (17.3-23.3)           1,521         17.2         (14.7-19.9)           1,400         15.2         (12.8-18.0)           1,658         15.4         (13.2-18.0)           697         22.6         (17.9-28.2)           354         18.2         (12.5-25.7)           464         13.1         (6.7-24.1)           473         10.8         (7.9-14.8)           633         18.6         (14.0-24.3)           948         18.6         (14.7-23.2)           1,026         22.7         (19.5-26.3)           869         22.2         (18.6-26.4)           322	6,845         18.0         (16.5-19.5)         2,802           310         31.8         (25.4-38.8)         119           855         30.2         (26.3-34.4)         356           1,125         21.6         (19.0-24.6)         493           1,348         15.1         (13.0-17.4)         615           1,158         9.8         (7.9-12.1)         507           991         4.7         (3.3-6.6)         402           1,021         0.7         (0.3-1.6)         302           6,139         18.0         (16.5-19.6)         2,516           484         21.0         (16.2-26.7)         194           1,569         20.1         (17.3-23.3)         652           1,521         17.2         (14.7-19.9)         590           1,400         15.2         (12.8-18.0)         606           1,658         15.4         (13.2-18.0)         658           697         22.6         (17.9-28.2)         296           354         18.2         (12.5-25.7)         *           464         13.1         (6.7-24.1)         129           473         10.8         (7.9-14.8)         176	6,845         18.0         (16.5-19.5)         2,802         26.6           310         31.8         (25.4-38.8)         119         44.4           855         30.2         (26.3-34.4)         356         43.0           1,125         21.6         (19.0-24.6)         493         30.0           1,348         15.1         (13.0-17.4)         615         21.6           1,158         9.8         (7.9-12.1)         507         15.1           991         4.7         (3.3-6.6)         402         8.9           1,021         0.7         (0.3-1.6)         302         1.4           6,139         18.0         (16.5-19.6)         2,516         27.3           484         21.0         (16.2-26.7)         194         26.4           1,569         20.1         (17.3-23.3)         652         29.4           1,521         17.2         (14.7-19.9)         590         26.5           1,400         15.2         (12.8-18.0)         606         21.1           1,658         15.4         (13.2-18.0)         658         23.3           697         22.6         (17.9-28.2)         296         31.5 <td< td=""><td>6,845         18.0         (16.5-19.5)         2,802         26.6         (24.2-29.2)           310         31.8         (25.4-38.8)         119         44.4         (34.0-55.4)           855         30.2         (26.3-34.4)         356         43.0         (36.6-49.6)           1,125         21.6         (19.0-24.6)         493         30.0         (25.6-34.8)           1,348         15.1         (13.0-17.4)         615         21.6         (18.1-25.6)           1,158         9.8         (7.9-12.1)         507         15.1         (11.8-19.2)           991         4.7         (3.3-6.6)         402         8.9         (6.2-12.6)           1,021         0.7         (0.3-1.6)         302         1.4         (0.5-3.8)           6,139         18.0         (16.5-19.6)         2.516         27.3         (24.7-30.1)           484         21.0         (16.2-26.7)         194         26.4         (18.4-36.3)           1,569         20.1         (17.3-23.3)         652         29.4         (24.6-34.6)           1,521         17.2         (14.7-19.9)         590         26.5         (22.2-31.3)           1,400         15.2         (12.8-18.0)</td></td<> <td>6,845         18.0         (16.5-19.5)         2,802         26.6         (24.2-29.2)         4,043           310         31.8         (25.4-38.8)         119         44.4         (34.0-55.4)         191           855         30.2         (26.3-34.4)         356         43.0         (36.6-49.6)         499           1,125         21.6         (19.0-24.6)         493         30.0         (25.6-34.8)         632           1,348         15.1         (13.0-17.4)         615         21.6         (18.1-25.6)         733           1,158         9.8         (7.9-12.1)         507         15.1         (11.8-19.2)         651           991         4.7         (3.3-6.6)         402         8.9         (6.2-12.6)         589           1,021         0.7         (0.3-1.6)         302         1.4         (0.5-3.8)         719           6,139         18.0         (16.5-19.6)         2,516         27.3         (24.7-30.1)         3,623           484         21.0         (16.2-26.7)         194         26.4         (18.4-36.3)         290           1,569         20.1         (17.3-23.3)         652         29.4         (24.6-34.6)         917</td> <td>  310   31.8   (25.4-38.8)   119   44.4   (34.0-55.4)   191   18.4    </td>	6,845         18.0         (16.5-19.5)         2,802         26.6         (24.2-29.2)           310         31.8         (25.4-38.8)         119         44.4         (34.0-55.4)           855         30.2         (26.3-34.4)         356         43.0         (36.6-49.6)           1,125         21.6         (19.0-24.6)         493         30.0         (25.6-34.8)           1,348         15.1         (13.0-17.4)         615         21.6         (18.1-25.6)           1,158         9.8         (7.9-12.1)         507         15.1         (11.8-19.2)           991         4.7         (3.3-6.6)         402         8.9         (6.2-12.6)           1,021         0.7         (0.3-1.6)         302         1.4         (0.5-3.8)           6,139         18.0         (16.5-19.6)         2.516         27.3         (24.7-30.1)           484         21.0         (16.2-26.7)         194         26.4         (18.4-36.3)           1,569         20.1         (17.3-23.3)         652         29.4         (24.6-34.6)           1,521         17.2         (14.7-19.9)         590         26.5         (22.2-31.3)           1,400         15.2         (12.8-18.0)	6,845         18.0         (16.5-19.5)         2,802         26.6         (24.2-29.2)         4,043           310         31.8         (25.4-38.8)         119         44.4         (34.0-55.4)         191           855         30.2         (26.3-34.4)         356         43.0         (36.6-49.6)         499           1,125         21.6         (19.0-24.6)         493         30.0         (25.6-34.8)         632           1,348         15.1         (13.0-17.4)         615         21.6         (18.1-25.6)         733           1,158         9.8         (7.9-12.1)         507         15.1         (11.8-19.2)         651           991         4.7         (3.3-6.6)         402         8.9         (6.2-12.6)         589           1,021         0.7         (0.3-1.6)         302         1.4         (0.5-3.8)         719           6,139         18.0         (16.5-19.6)         2,516         27.3         (24.7-30.1)         3,623           484         21.0         (16.2-26.7)         194         26.4         (18.4-36.3)         290           1,569         20.1         (17.3-23.3)         652         29.4         (24.6-34.6)         917	310   31.8   (25.4-38.8)   119   44.4   (34.0-55.4)   191   18.4					

Table 37 (continued) Respondents Who Engage in Binge Drinking, 2005										
		Total Male Female							le	
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI	
Marital Status										
Married/Unmarried Couple	4,116	16.4	(14.9-17.9)	1,836	23.3	(21.0-25.9)	2,280	9.4	(8.0-11.0)	
Divorced/Separated	954	18.4	(15.6-21.7)	396	29.7	(24.5-35.5)	558	9.2	(6.7-12.5)	
Widowed	967	967 2.0 (1.2-3.5) 158 5.3 (2.3-11.5) 809 1.3 (0.6-2.6)								
Never Married	797	31.1	(25.6-37.2)	408	39.5	(31.5-48.2)	389	18.6	(13.4-25.2)	

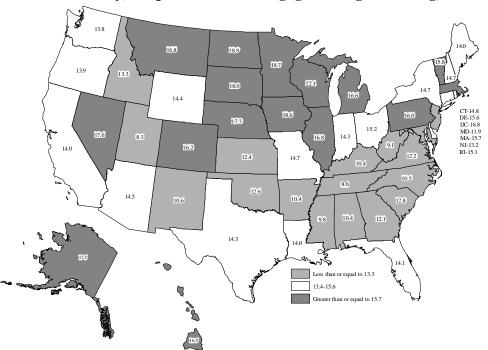
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **National Statistics**

The national median for respondents who binge drink is 14.4 percent. South Dakota had 18 percent of respondents who binge drink. Utah had the lowest percent of respondents who binge drink with 8.3 percent, while Wisconsin had the highest percent of respondents who binge drink with 22.1 percent.

Figure 31 Nationally, Respondents Who Engage in Binge Drinking, 2005



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **Further Analysis**

Following are data illustrating the percent of those who engage in binge drinking for various health behaviors and conditions. For example, 32.4 percent of respondents who stated they currently smoke binge drink, while 13.8 percent of respondents who stated they used to smoke binge drink.

Table 38 Binge Drinking for Selected Health Behaviors and Conditions, 2005									
Health Behavior or Condition	# Respondents	% Binge Drinkers	95% CI						
Fair or Poor Health Status	1,116	12.2	9.1-16.2						
Excellent, Very Good, or Good Health Status	5,722	18.8	17.3-20.5						
Physical Health Not Good for 30 days of the past 30	512	5.5	3.4-8.5						
Physical Health Not Good for 0-29 days of the past 30	6,269	18.8	17.3-20.4						
Mental Health Not Good for 20-30 days of the past 30	353	19.2	13.7-26.4						
Mental Health Not Good for 0-19 days of the past 30	6,448	17.9	16.5-19.5						
Usual Activities Unattainable for 10-30 Days of the Past 30	458	8.1	5.4-11.9						
Usual Activities Unattainable for 0-9 Days of the Past 30	6,351	18.6	17.1-20.1						
Dissatisfied / Very Dissatisfied with Life	266	17.3	10.9-26.1						
Satisfied / Very Satisfied with Life	6,379	17.8	16.3-19.3						
Obese (BMI = 30.0+)	1,757	17.4	14.6-20.5						
Overweight (BMI = 25.0-29.9)	2,531	19.4	17.2-21.9						
Recommended Weight (BMI = 18.5-24.9)	2,189	18.5	15.9-21.3						
Underweight (BMI < 18.5)	102	10.2	4.0-23.6						
No Leisure Time Physical Activity	1,754	14.9	12.6-17.6						
Leisure Time Physical Activity	5,090	18.8	17.2-20.6						
No Moderate Physical Activity	3,576	18.1	16.1-20.3						
Moderate Physical Activity	2,927	18.3	16.2-20.5						
No Vigorous Physical Activity	5,362	17.1	15.5-18.8						
Vigorous Physical Activity	1,269	20.8	17.5-24.5						
Less Than Five Servings of Fruits and Vegetables	5,178	20.6	18.9-22.4						
At Least Five Servings of Fruits and Vegetables	1,586	7.4	5.7-9.6						
Not Heard of "Healthy South Dakota" Program	4,438	19.0	17.2-21.0						
•	2,115	15.0	13.1-17.6						
Heard of "Healthy South Dakota" Program	·								
Current Smoker	1,291	32.4	28.6-36.5						
Former Smoker Never Smoked	1,915	13.8 14.8	11.8-16.1						
	3,621		12.9-16.8						
Smokeless Tobacco Use No Smokeless Tobacco Use	356	44.5 16.0	36.6-52.7						
	6,285		14.6-17.4						
Heavy Drinker	227	82.4 14.8	76.0-87.5						
Not a Heavy Drinker	6,552		13.5-16.2						
Hypertension	2,212	11.6	9.9-13.6						
No Hypertension	4,625	20.1	18.3-22.0						
High Blood Cholesterol	2,080	11.9	10.2-13.9						
No High Blood Cholesterol	3,405	15.9	14.2-17.8						
Not Taking any Precautions Against West Nile Virus	2,087	18.4	15.5-21.7						
Taking Precautions Against West Nile Virus	4,525	17.5	15.9-19.2						
No Health Insurance (18-64)	410	23.1	16.8-30.9						
Health Insurance (18-64)	4,197	21.4	19.6-23.3						
Employer Based Health Insurance Coverage (18-64)	2,757	22.2	20.0-24.5						
Private Health Insurance Plan (18-64) Medicare (18-64)	633	22.5	17.6-28.3						
Medicare (18-64)  Medicaid or Medical Assistance (18-64)	143 179	8.4 16.4	4.4-15.5 9.9-26.0						
The Military, CHAMPUS, TriCare, or the VA (18-64)	209	15.6	10.6-22.2						
The Indian Health Service (18-64)	209	25.2	17.6-34.6						
No Flu Shot (65+)	496	4.3	2.5-7.0						
Flu Shot (65+)	1,511	2.1	1.4-3.1						
No Pneumonia Shot (65+)	651	3.9	2.5-6.1						
Pneumonia Shot (65+)	1,298	1.7	1.0-2.7						
Diabetes	601	6.8	4.7-9.8						
No Diabetes	6,243	18.7	17.2-20.3						
NO DIAUCIUS	0,243	10./	17.4-40.3						

Table 38 (continued)								
Binge Drinking for Selected Health	Behaviors and C	Conditions, 2005						
Health Behavior or Condition	# Respondents	% Binge Drinkers	95% CI					
Current Asthma	508	12.7	8.5-18.6					
Former Asthma	175	15.9	8.7-27.2					
Never Had Asthma	6,131	18.5	17.0-20.1					
Previously Had a Heart Attack	434	4.8	2.7-8.5					
Never Had a Heart Attack	6,369	18.6	17.2-20.2					
Have Angina or Coronary Heart Disease	443	3.6	2.0-6.3					
Do Not Have Angina or Coronary Heart Disease	6,344	18.7	17.2-20.3					
Previously Had a Stroke	255	8.3	3.0-21.1					
Never Had a Stroke	6,574	18.2	16.8-19.8					
Arthritis	2,405	10.5	8.9-12.2					
No Arthritis	4,369	20.9	19.0-22.9					
Arthritis - Activities Limited	1,154	7.6	5.9-9.8					
No Arthritis - Activities Limited	5,615	19.6	17.9-21.3					
Physical, Mental, or Emotional Disability	1,569	10.0	7.9-12.5					
No Physical, Mental, or Emotional Disability	5,238	19.8	18.2-21.6					
Disability with Special Equipment Needed	599	4.7	2.9-7.7					
No Disability with Special Equipment Needed	6,214	18.8	17.3-20.4					
Two or More Hours of TV Watched per Day	4,821	18.5	16.8-20.3					
Less Than Two Hours of TV Watched per Day	1,763	15.9	13.4-18.9					
Never Been Tested for HIV (18-64)	3,453	21.2	19.1-23.4					
Been Tested for HIV (18-64)	1,148	22.0	19.1-25.2					
Military Veteran	1,117	15.2	12.8-18.0					
Not a Military Veteran	5,709	18.5	16.9-20.2					

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

#### **HEAVY DRINKING**

Definition: Male respondents who report having more than 2 drinks per day, or female respondents who report having more than 1 drink per day.

# **Prevalence of Heavy Drinking**

- South Dakota 4.3%
- Nationwide median 4.9%

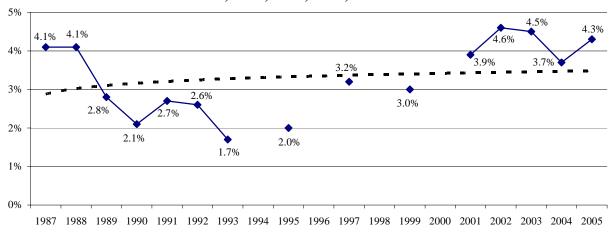
# **Healthy People 2010 Objective**

There was no stated Healthy People 2010 Objective for heavy drinking.

### **Trend Analysis**

From 1987 to 1993, the percent of respondents who engaged in heavy drinking was on a decline. However, since 1993 the percent of respondents has been increasing reaching a high in 2002 with 4.6 percent before decreasing in 2003 to 2004 only to increase again in 2005.

Figure 32 Percent of Respondents Who Engage in Heavy Drinking, 1987-1993, 1995, 1997, 1999, and 2001-2005



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1987-1993, 1995, 1997, 1999, and 2001-2005

#### **Demographics**

Gender Overall males exhibit a significantly higher prevalence of heavy drinking than females. This difference is most evident in whites and those who have never

been married.

The prevalence of heavy drinking generally decreases as age increases. This Age decline is much more evident in males with females not exhibiting the same

association.

Race There are no significant racial differences observed from the available data.

Region There are no significant regional differences observed from the available data. **Household** The prevalence of heavy drinking does not seem to follow a pattern as household income increases.

**Education** The prevalence of heavy drinking does not seem to follow a pattern as education levels increase.

**Employment** Those who are unemployed demonstrate a very high prevalence of heavy drinking, while those who are a homemaker, retired, or unable to work show a very low prevalence.

Marital Those who are divorced, separated, or have never been married exhibit a very high prevalence of heavy drinking, while those who are widowed show a very low prevalence. Also, males who are married demonstrate a very low prevalence.

	Respond	ents W		le 39 e in Heav	vv Dri	nking, 200	)5		
	l	Total	no Engag	- III II CU	Male	<i>U</i> /		Fema	le
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	6,808	4.3	(3.5-5.3)	2,790	5.6	(4.2-7.4)	4,018	3.0	(2.4-3.9)
Age	.,,		(====)	,		( ) /	,,,		( 1 2 11 )
18-24	309	6.5	(3.6-11.4)	119	10.4	(5.3-19.4)	190	2.4	(0.8-7.3)
25-34	858	5.1	(2.7-9.3)	359	7.3	(3.2-15.5)	499	2.8	(1.4-5.5)
35-44	1,115	5.3	(3.9-7.0)	487	5.7	(3.7-8.5)	628	4.9	(3.2-7.4)
45-54	1,338	4.5	(3.4-5.9)	613	4.9	(3.3-7.2)	725	4.1	(2.8-6.0)
55-64	1,155	3.7	(2.6-5.3)	510	3.8	(2.2-6.2)	645	3.6	(2.2-6.0)
65-74	984	1.9	(1.1-3.1)	396	3.1	(1.7-5.7)	588	0.8	(0.3-1.8)
75+	1,013	1.0	(0.4-2.0)	298	0.8	(0.2-3.1)	715	1.1	(0.4-2.6)
Race	-,,,,,	-10	(011 =10)	-, -	0.0	(**= ***)			(011 =10)
White	6,106	4.4	(3.6-5.5)	2,502	5.9	(4.4-7.9)	3,604	3.1	(2.4-3.9)
American Indian	480	2.6	(1.4-5.0)	194	2.7	(1.1-6.7)	286	2.5	(1.0-6.2)
Region		-10	(211 210)	-, .	,,	(212 211)			(210 012)
Southeast	1,560	5.2	(3.6-7.4)	648	6.9	(4.2-11.0)	912	3.5	(2.2-5.4)
Northeast	1,510	3.6	(2.6-5.0)	582	4.3	(2.6-7.1)	928	3.0	(2.1-4.4)
Central	1,397	4.0	(2.8-5.7)	608	6.1	(3.9-9.4)	789	2.0	(1.2-3.2)
West	1,649	3.7	(2.5-5.4)	655	4.5	(2.6-7.9)	994	3.0	(1.9-4.7)
American Indian Counties	692	3.7	(2.2-6.0)	297	4.8	(2.5-8.9)	395	2.5	(1.1-5.4)
Household Income			( 1 111)			( 12 211 )			( ) = /
Less than \$10,000	351	3.3	(1.7-6.6)	*	*	*	*	*	*
\$10,000-\$14,999	465	0.8	(0.3-2.2)	130	0.9	(0.3-2.9)	335	0.8	(0.2-3.4)
\$15,000-\$19,999	470	2.3	(1.2-4.3)	173	2.7	(1.2-6.3)	297	2.0	(0.8-5.0)
\$20,000-\$24,999	630	4.3	(2.1-8.7)	241	5.7	(1.7-17.1)	389	3.3	(1.7-6.0)
\$25,000-\$34,999	943	5.3	(3.3-8.4)	412	6.4	(3.2-12.3)	531	4.2	(2.4-7.1)
\$35,000-\$49,999	1,214	4.8	(3.6-6.5)	556	6.3	(4.2-9.1)	658	3.3	(2.1-5.2)
\$50,000-\$74,999	1,015	4.1	(2.7-6.3)	486	4.5	(2.7-7.6)	529	3.7	(1.8-7.4)
\$75,000+	870	5.2	(3.4-7.9)	465	5.4	(2.9-9.7)	405	4.9	(2.9-8.2)
Education									
8th Grade or Less	321	1.2	(0.5-3.2)	149	2.3	(0.9-5.9)	172	0.0	
Some High School	397	10.4	(4.6-21.6)	171	14.9	(5.6-33.9)	226	4.9	(1.9-12.1)
High School or G.E.D.	2,154	4.2	(3.3-5.3)	938	4.9	(3.5-6.8)	1,216	3.4	(2.3-4.8)
Some Post-High School	1,962	4.9	(3.6-6.7)	710	6.7	(4.3-10.1)	1,252	3.6	(2.3-5.4)
College Graduate	1,965	2.9	(1.9-4.5)	818	3.7	(1.9-6.9)	1,147	2.1	(1.3-3.4)
Employment Status									· · · · · · · · · · · · · · · · · · ·
Employed for Wages	3,316	4.5	(3.5-5.7)	1,363	5.1	(3.6-7.3)	1,953	3.8	(2.8-5.1)
Self-employed	884	4.8	(3.4-6.9)	589	5.5	(3.6-8.2)	295	3.4	(1.8-6.4)
Unemployed	165	19.0	(8.0-38.7)	*	*	*	*	*	*
Homemaker	405	2.1	(1.0-4.4)	*	*	*	*	*	*
Student	125	4.2	(1.4-11.5)	*	*	*	*	1.5	*
Retired	1,631	2.1	(1.4-3.2)	597	2.5	(1.4-4.3)	1,034	1.8	(0.9-3.4)
Unable to Work	280	1.2	(0.3-4.0)	116	1.6	(0.3-8.2)	164	0.8	(0.1-5.2)

Table 39 (continued) Respondents Who Engage in Heavy Drinking, 2005									
		Total Male Female						le	
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Marital Status									·
Married/Unmarried Couple	4,098	3.5	(2.9-4.3)	1,829	3.8	(2.8-4.9)	2,269	3.3	(2.5-4.5)
Divorced/Separated	945	5.6	(4.0-7.8)	391	8.4	(5.4-12.6)	554	3.4	(1.9-5.8)
Widowed	961	1.3	(0.7-2.3)	158	1.9	(0.8-4.7)	803	1.1	(0.5-2.4)
Never Married	794	8.1	(4.8-13.2)	408	11.6	(6.4-20.0)	386	2.9	(1.5-5.7)

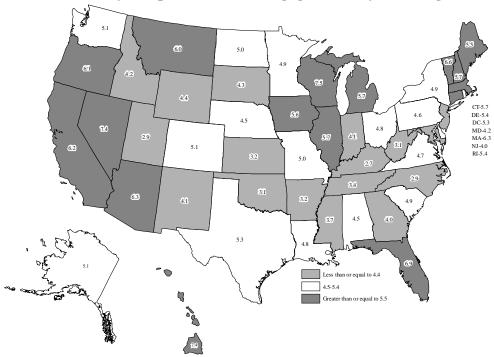
Note: \*Results based on sample sizes less than 100 have been suppressed.

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **National Statistics**

The national median for respondents who engage in heavy drinking is 4.9 percent. South Dakota had 4.3 percent of respondents who engage in heavy drinking. Kentucky had the lowest percent of respondents who engage in heavy drinking with 2.7 percent, while Wisconsin had the highest percent of respondents who engage in heavy drinking with 7.5 percent.

Figure 33 Nationally, Respondents Who Engage in Heavy Drinking, 2005



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005

# **Further Analysis**

Following are data illustrating the percent of those who engage in heavy drinking for various health behaviors and conditions. For example, 10 percent of respondents who stated they are dissatisfied or very dissatisfied with life are heavy drinkers, while 4.0 percent of respondents who stated they are satisfied or very satisfied with life are heavy drinkers.

Table 4 Heavy Drinking for Selected Health 1		Conditions, 2005	
Health Behavior or Condition	# Respondents	% Heavy Drinkers	95% CI
Fair or Poor Health Status	1,110	5.5	3.2-9.1
Excellent, Very Good, or Good Health Status	5,691	4.1	3.3-5.1
Physical Health Not Good for 30 days of the past 30	507	1.6	0.7-3.5
Physical Health Not Good for 0-29 days of the past 30	6,238	4.5	3.7-5.5
Mental Health Not Good for 20-30 days of the past 30	350	8.1	4.3-14.5
Mental Health Not Good for 0-19 days of the past 30	6,415	4.1	3.3-5.1
Usual Activities Unattainable for 10-30 Days of the Past 30	454	1.6	0.8-3.2
Usual Activities Unattainable for 0-9 Days of the Past 30	6,317	4.5	3.6-5.5
Dissatisfied / Very Dissatisfied with Life	265	10.0	4.9-19.1
Satisfied / Very Satisfied with Life	6,350	4.0	3.2-4.9
Obese (BMI = 30.0+)	1,749	4.3	2.6-7.2
Overweight (BMI = $25.0-29.9$ )	2,515	4.2	3.1-5.5
Recommended Weight (BMI = 18.5-24.9)	2,176	4.8	3.6-6.5
Underweight (BMI < 18.5)	103	3.2	1.2-8.1
No Leisure Time Physical Activity	1,747	4.5	3.3-6.2
Leisure Time Physical Activity	5,060	4.3	3.3-5.4
·	3,554	4.4	3.3-5.9
No Moderate Physical Activity  Moderate Physical Activity	2,916	4.4	3.1-5.4
No Vigorous Physical Activity	5,330	4.4	3.5-5.5
Vigorous Physical Activity	1,268	4.0	2.5-6.4
Less Than Five Servings of Fruits and Vegetables	5,155	4.9	4.0-6.1
At Least Five Servings of Fruits and Vegetables	1,577	2.0	1.3-3.0
Not Heard of "Healthy South Dakota" Program	4,423	4.6	3.6-5.9
Heard of "Healthy South Dakota" Program	2,100	3.4	2.4-4.7
Current Smoker	1,285	11.4	8.4-15.2
Former Smoker	1,896	3.3	2.4-4.4
Never Smoked	3,609	2.3	1.6-3.2
Smokeless Tobacco Use	357	13.2	7.0-23.6
No Smokeless Tobacco Use	6,253	3.6	3.0-4.4
Binge Drinker	889	19.4	15.6-23.9
Not a Binge Drinker	5,890	0.9	0.6-1.2
Hypertension	2,195	3.6	2.7-4.8
No Hypertension	4,605	4.5	3.6-5.8
High Blood Cholesterol	2,069	2.6	1.9-3.5
No High Blood Cholesterol	3,382	3.7	2.9-4.8
Not Taking any Precautions Against West Nile Virus	2,078	6.0	4.1-8.7
Taking Precautions Against West Nile Virus	4,503	3.4	2.8-4.3
No Health Insurance (18-64)	410	9.9	5.0-18.5
Health Insurance (18-64)	4,183	4.4	3.6-5.5
Employer Based Health Insurance Coverage (18-64)	2,752	4.7	3.6-6.1
Private Health Insurance Plan (18-64)	628	3.2	2.1-4.8
Medicare (18-64)	144	2.3	0.9-5.7
Medicaid or Medical Assistance (18-64)	178	6.3	2.0-18.5
The Military, CHAMPUS, TriCare, or the VA (18-64)	210	4.0	2.0-7.9
The Indian Health Service (18-64)	222	3.6	1.5-8.1
No Flu Shot (65+)	493	1.5	0.6-3.4
Flu Shot (65+)	1,498	1.4	0.8-2.2
No Pneumonia Shot (65+)	647	1.6	0.8-3.2
Pneumonia Shot (65+)	1,288	1.2	0.7-2.1
Diabetes	597	1.1	0.5-2.3
No Diabetes	6,210	4.5	3.7-5.5
Current Asthma	509	2.8	1.3-5.8
Former Asthma	176	0.4	0.1-1.8
Never Had Asthma	6,093	4.6	3.7-5.6

Table 40 (continued)									
Heavy Drinking for Selected Health Behaviors and Conditions, 2005									
Health Behavior or Condition	# Respondents	% Heavy Drinkers	95% CI						
Previously Had a Heart Attack	428	1.2	0.5-3.1						
Never Had a Heart Attack	6,338	4.4	3.6-5.4						
Have Angina or Coronary Heart Disease	437	1.5	0.6-3.7						
Do Not Have Angina or Coronary Heart Disease	6,313	4.4	3.6-5.4						
Previously Had a Stroke	251	6.6	1.8-21.3						
Never Had a Stroke	6,541	4.2	3.5-5.2						
Arthritis	2,395	3.1	2.3-4.2						
No Arthritis	4,346	4.8	3.7-6.1						
Arthritis - Activities Limited	1,147	2.5	1.6-3.8						
No Arthritis - Activities Limited	5,588	4.6	3.7-5.7						
Physical, Mental, or Emotional Disability	1,561	3.4	2.2-5.4						
No Physical, Mental, or Emotional Disability	5,212	4.5	3.6-5.6						
Disability with Special Equipment Needed	594	2.2	0.9-4.9						
No Disability with Special Equipment Needed	6,185	4.4	3.6-5.4						
Two or More Hours of TV Watched per Day	4,800	4.5	3.5-5.7						
Less Than Two Hours of TV Watched per Day	1,754	3.5	2.3-5.4						
Never Been Tested for HIV (18-64)	3,438	4.8	3.7-6.2						
Been Tested for HIV (18-64)	1,146	4.5	3.0-6.6						
Military Veteran	1,114	3.7	2.5-5.4						
Not a Military Veteran	5,675	4.4	3.5-5.5						

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2005